

PERMIT CHECK LIST

The following people have reviewed the permit:

Reviewing Permit Writer: _____

Air Compliance Manager: _____

Date: Date

Source Name: HRSD Atlantic WWTP Registration No.: 60959 Id. No.: 51-810-00035

Source Location: 645 Firefall Drive, Virginia Beach, VA 23454

Mail Address: PO Box 5911, Virginia Beach, VA 23471

Source Status: _____ Greenfield X Currently operating

Source Classification: _____ Minor X SynMinor _____ State Major _____ PSD Major _____ TV Major

Permit Action: (Describe new/modified equipment and/or processes, include maximum rated capacities) The facility is proposing a "green energy project" known as the Atlantic Combined Heat Power (CHP) project in which two generators (DG1 and DG2, 1531 hp each) will be installed to use pre-cleaned digester gas as fuel to produce electricity while the waste engine heat is used to heat the digesters and the building. Currently, the digester gas is used as-is as a fuel for 4 boilers (B1-B4, 8.4 mmBtu/hr each) or flared off through the facility's waste gas burners (flares F1-F3).

X **Inspector Contacted Consulted**

Permit Action Program:

_____ NSR X SOP _____ TV _____ Maj HAP _____ General

Permit Action Type:

_____ Exemption

_____ New / Article 6 Modification (delete one) X Significant Amendment/Modification

_____ Minor Amendment/Modification _____ Administrative Amendment _____ Renewal

_____ State Major _____ PSD _____ Non-Attainment _____ General Permit

Y (Y/N) Permit Includes All Emission Units at Source.

Y (Y/N) Permit Allows Source to avoid Title V/MACT/etc.

After this permit, source is: _____ Major (A) _____ Minor (B) X Synthetic minor (SM)
(NOx Pollutant, SO₂ Pollutant, CO Pollutant)

Permit Application Review

X Permit application submitted, or _____ Letter Request

Application Received Date: 3/22/12

Application Complete Date: 8/10/12

Permit Deadline Date: 1/08/13

X Document Certification Form received

N Confidential information with sanitized copy. If yes, which sections:

_____ throughputs _____ individual pollutants _____ flow diagrams _____ calculations

_____ process descriptions _____ other (describe)

If yes, has claim been accepted by DEQ? (Y/N) - Date of letter: _____

NA Copy of letter from local official for greenfield, or major modified sources

NA Copy of letter sent to FLM if applicable. (Comments)

NA Notification of Affected State(s)

This permit supersedes permit(s) dated 1/14/09.

Regulatory Review

Regulatory Review (cont.)

BACT Determination (check one):

X DG1 and DG2 meets the NSPS Subpart JJJJ standards for digester gas engines, hence they meet BACT for NO_x, CO and VOC; they also meet BACT for SO₂ due to the 50 ppmv H₂S limit in digester gas fuel (see comments), or

___ TV/SOP/BACT not applicable. (Explain) _____

Y (Y/N) NSPS/MACT/NESHAPS Applicability: If Y, Subpart(s):

III and JJJJ NSPS

ZZZZ MACT

___ NESHAPS

N (Y/N) Existing Rules (9 VAC 5 Chapter 40) Applicability: If Y, Rule(s):

Toxic Pollutants (check one):

X Exempt, or ___ in compliance with 9 VAC 5-60-320, or ___ not evaluated.

Comments: The proposed generators DG1 and DG2 are subject to MACT ZZZZ, hence it is exempt by 9 VAC 5-80-1320 F.

Modeling (check one):

___ Attached (including background monitors), or

___ Copy of approval letter from modeling section,

X No modeling required by agency policy (< modeling significance levels, etc.)

Site Suitability:

X Site suitable from an air pollution standpoint, inspection date 5/25/12, or no inspection required because _____.

X Calculation sheet(s) attached

N (Y/N) NSR Netting Comments (Explain Permit History):

N (Y/N) (CAM) Compliance Assurance Monitoring Applicable

Permit includes: X Stack Testing ___ CEM X VEE by source

Public Participation

Y (Y/N) Public Noticed. If yes, Public Notice Date:

___ (Y/N) Public Notice Comments. If yes, number and nature of comments:

___ (Y/N) Public Hearing. If yes, Public Hearing Date:

EPA Review

N (Y/N) EPA Review. If yes, Date proposed permit sent to EPA _____.

N (Y/N) EPA Comments. If yes, give a brief summary _____.

Other Comments and Final Recommendations (attach memo or list below):

Comments:

Determination of applicable regulations:

The facility proposed the installation of the two generators (DG1 and DG2) with lean-burn engines using treated digester gas and no other changes to other emission units at the facility that are permitted in the SOP dated 1/14/09. The digester gas will be treated by a biogas cleaning/conditioning system to remove H₂S, siloxane, particulates and other contaminants prior to use by the engines. The system consists of a BioStrip System for initial H₂S removal by sulfur-oxidizing bacteria, a SulfrPack CIS System for further H₂S removal by iron sponge, and a SAGPack System for removal of siloxane, particulates, and other contaminants.

Regulatory Review (cont.)

Uncontrolled emissions from DG1 and DG2 (see attached calculations) are above the exemption levels for SO₂, NO_x, CO, and VOC in 9 VAC 5-80-1320 D, hence, this permit action is an Article 6 modification even though it will be processed under the umbrella of a facility-wide SOP significant modification.

BACT is also applicable to DG1 and DG2. The engines are subject to NSPS Subpart JJJJ as they are manufactured after 7/01/07. Based on the submitted manufacturer's specifications, the engine performance meet the applicable standards for NO_x, CO and VOC (see attached calculation sheet); hence the engines meet BACT for those pollutants. According to the facility's 4/04/12 submittal entitled "ATP CHP Contract Forms and Technical Specifications", page 41/92, there will be manufacturer's certification that the engines meet "specified exhaust emissions". However, the facility is not sure at this time if the manufacturer's "certification" is in accordance with the NSPS as the manufacturer certification requirement is voluntary for engines of this size and fuel type (40 CFR 60.4231 and 4241). If the engines are not certified as such, initial notification to EPA and performance testing are required. The facility is aware of this (see e-mail dated 6/28/12). General reminder of the non-delegated federal requirements will be in the cover letter of the permit in accordance with DEQ procedure in APG-569.

There is no digester gas sulfur content standard in NSPS Subpart JJJJ. The facility proposed a concentration of 50 ppmv H₂S in the pre-cleaned digester gas feed to DG1 and DG2 which is equivalent to 0.013 lbs/mmBtu (see attached calculation sheet). This is better than required by NSPS Subpart KKKK standard of 0.15 lbs/mmBtu for biogas combustion turbines (40 CFR 60.4330), or by NSPS Subpart J standard of 162 ppmv for fuel gas at petroleum refineries. Hence, it can be considered that BACT for SO₂ is met. Continuous monitoring for H₂S concentration in the gas feed to DG1 and DG2 is required with sufficient monitoring device observations to ensure good performance.

DG1 and DG2 are also subject to MACT Subpart ZZZZ which has no further requirements for new engines at area sources beyond the NSPS requirements.

Emissions calculations and re-evaluation of the facility's synthetic minor status:

In the initial permit application dated 3/07/12, the facility was focusing on NO_x and SO₂ emissions and was satisfied that, by adding the potential emissions of new units DG1 and DG2 to the current the facility-wide emission limits, the results are still be below the Title V major source level and the facility will retain its synthetic minor source status. It did not recognize that the 44.4 tons/yr CO emissions from the new generators would bring the facility-wide CO emissions from the current limit of 63.4 tons/yr to greater than 100 tons/yr (63.4 tons/yr + 44.4 tons/yr= 107.8 tons/yr) and make the facility a Title V major source (see DEQ deficiency letter dated 4/16/12) unless the operation limits of other emission units are adjusted. Therefore, to determine if the facility can stay as a synthetic minor source, an integrated approach to the digester gas utilization by the facility's equipment is necessary as there is a finite amount of digester gas that can be produced by the digester and shared among the boilers B1-B4, the waste gas burners (flares) F1-F3, and the new generators DG1-DG2. In the current SOP, throughput limits for boilers B1-B4 and waste gas burners F1-F3 are 109 mmscf/yr and 184 mmscf/yr, respectively.

Subsequently, the facility has re-determined that the potential maximum amount of digester gas generated by the anaerobic digesters at the facility is 345.3 million scf/year. The potential maximum amount consumed by DG1 and DG2 operation at 8760 hrs/yr is:

$$550 \text{ scf/min} \times 60 \text{ min/hr} \times 8760 \text{ hrs/yr} = 289.1 \text{ mmscf/yr}$$

Regulatory Review (cont.)

Any digester gas not actually used by DG1 and DG2 can be burned in boilers B1-B4 (that provide heat to the digesters, usually in winter months) or sent to flares F1-F3. In either case of external combustion, the SO₂ emission factor is the same; the digester gas is burned as-is, not treated for H₂S removal. On the other hand, for use by internal combustion engines in DG1 and DG2, the digester gas is pretreated by a multi-step cleaning process to remove H₂S, hence, SO₂ emissions are much reduced. Worst case scenario for SO₂ emissions is clearly when all digester gas is burned as-is by B1-B4 or by F1-F3. It is not as simple to identify the worst case scenario for other pollutants. Therefore, EF for the units are converted to lbs/mmscf and compiled into a table so that the equipment with highest EF can be identified for each pollutant. This will help to derive the worst case facility-wide emissions from the total use of 345.3 mmscf/yr of digester gas while giving the facility as much flexibility as possible for their operation. The throughput limits specifically requested by the facility, such as 289.1 mmscf (maximum potential) for DG1 and DG2, the current 109 mmscf/yr limit for B1-B4 (facility's 5/21/12 e-mail) and the current 184 mmscf/year limit for F1-F3 (facility's 6/18/12 e-mail), are allowable as long as the total digester gas usage is 345.3 mmscf/yr or less. See new Condition 9 for throughput limits and attached worksheet for worst case facility-wide emission calculations. A throughput limit for F1-F3 appears unnecessary because only the digester gas not actually used by B1-B4 and DG1-DG2 will be combusted in the flares. However, without a throughput limit, the amount of digester gas to flares could theoretically be up to 345.3 mmscf/yr while the 184 mmscf/yr throughput limit for F1-F3 was determined as BACT for SO₂ in the 1/14/2009 SOP.

Other facility equipment not using digester gas includes three distillate oil-fired boilers B5- B7, three diesel generators D1-D3, liquid management, solid management, and three fuel oil storage tanks (T1-T3). Their emission limits contribute to the facility-wide emission limits, hence, need to be reviewed to see if any adjustment can be made taking into account the facility's actual operation since the last permit issuance. Tanks T1-T3 have previously been determined to have insignificant VOC emissions. There are no changes to the liquid or solid management at the facility which have VOC emissions of 20.0 tons/yr and 1.5 tons/yr, respectively.

D3 is subject to NSPS Subpart IIII; the standard for diesel sulfur content is now 15 ppm (0.0015%) instead of 500 ppm (0.05%) as used in calculation for 1/14/09 SOP. Facility also uses the same fuel containing 15 ppm sulfur for engines D1 and D2 (5/21/12 e-mail) and boilers B5-B7 (6/20/12 e-mail). It was also noted that AP-42 emission factors were used to derive emission limits for the generators in the 1/14/09 SOP even though EF provided by the manufacturers are generally lower. Additionally, it was found from the manufacturer specifications that the maximum fuel consumption for D3 is 125 gal/hr, not 250 gal/hr as used in calculating the fuel throughput for D3 in 1/14/09 SOP. Given that the combined throughput for D1 and D2 is 137,200 gal/yr (verified), the needed diesel throughput for D1, D2 and D3 operating at 500 hrs/yr each should be:

$$137,200 \text{ gal} + (500 \times 125 \text{ gal/hr}) = 199,700 \text{ gal/yr}$$

instead of:

$$137,200 \text{ gal} + (500 \times 250 \text{ gal/hr}) = 262,200 \text{ gal/yr (1/14/09 SOP Condition 4)}$$

Hence emission limits for D1-D3 are recalculated with manufacturer's EF and revised fuel sulfur content and throughputs (see attached worksheet).

Emissions from boilers B5-B7 are also recalculated to take into account the S content of 15 ppm in distillate oil (see attached boiler calculation sheet). Note that those small boilers have no fuel throughput limit.

Regulatory Review (cont.)

The resulting facility-wide emissions of SO₂ and NO_x are lower than in 1/14/09 SOP while those of CO and VOC are slightly higher. However, all are below the Title V major source levels.

HAPs Emissions:

According to the 1/14/09 SOP checklist, individual toxics pollutant emissions are exempt from state toxics rule and their total emissions are estimated at 11.0 tons/yr. The main contributors are 9.5 tons/yr from liquid management (main constituents are 2.44 tons/yr toluene and 3.76 tons/yr CS₂) and 1.3 tons/yr from F1-F3 (main constituents are not identified). For the new DG1 and DG2, the only HAP identified is formaldehyde at 8.9 tons/yr (based on the EF provided by the manufacturer) which would be above the exemption level in 9 VAC 5-60-300 C1. However, the units are subject to MACT ZZZZ, hence, they are exempt from state toxics rule by 9 VAC 5-80-1320 F. As seen from the attached calculation sheet, facility-wide HAP emissions are still below the 10 tons/yr for individual HAP and below 25 tons/yr threshold for total HAPs. The estimates are conservatively based on the maximum throughputs for each equipment that uses digester gas; no attempt is made to find the worst case scenario for a total limit of 345.3 mmscf/yr as in the case of criteria pollutants as discussed above. The results indicate that the facility is still a synthetic minor source.

Changes to 1/14/09 SOP: Other than boilerplate and other minor changes, the following changes are made:

Old Condition 2- Equipment list: The three diesel underground storage tanks T1-T3 are not subject to NSPS Subpart Kb in accordance with the amended NSPS, based on size and content vapor pressure. The facility's generator engine D3 is subject to NSPS Subpart IIII while D1 and D2 are not, however, all three are subject to MACT ZZZZ.

Old Condition 4= New Condition 8: Throughput limit for D1-D3 is changed as discussed above.

Old Conditions 5 and 6 = New Condition 9- Digester gas throughput limits for B1-B4, DG1-DG2, F1-F3, and combined limit for all are required as discussed above.

New Conditions 3, 4, and 5: SO₂ emission control and digester gas H₂S concentration monitoring requirements for DG1 and DG2.

Old Conditions 7, 8, 9, and 10= New Conditions 10 and 11: D3 is required by NSPS Subpart IIII to use 0.0015% S diesel. Facility volunteered to use fuel with the same sulfur content for D2 and D3, as well as for boilers B5-B7 to reduce SO₂ emissions. The ASTM specification for diesel oil and fuel oil #2 is D975 and D396, respectively. Hence, it is decided not to cite the ASTM specification in the fuel and fuel certification boilerplate conditions, but keep the focus on the sulfur content. Additionally, the 9 VAC 5-50-410 citation is removed in accordance with current guidance on non-delegated NSPS (APG-569).

Old Condition 11: Deleted as Tanks T1-T3 are not subject to NSPS Subpart Kb.

New Condition 12: Emission limits for DG1 and DG2

Old Condition 12= New Condition 13: D1-D3 emission limits are recalculated as discussed above. Note that tons/yr for PM, PM-10 and SO₂ are below 0.5 tons/yr, hence, they are not listed.

Old Conditions 13 and 14= New Conditions 14 and 15: Emission limits for boilers B1-B4 and flares F1-F3 are slightly changed because of the following differences in calculations. A digester gas heat content of 650 Btu/scf is used while in 1/14/2009 SOP, 750 Btu/cf was used for boilers and 600 Btu/cf for flares. It is decided to use the value of 650 Btu/scf as given in the new permit application for all equipment. Also, for the combined emissions in tons/yr, the values are the worst case between 8760 hrs/yr NG combustion, and 109 mmscf/yr

Regulatory Review (cont.)

digester gas combustion plus NG combustion the remainder of time to make 8760 hrs/yr. In 1/14/2009 SOP, the values were the worst case between 8760 hrs/yr NG combustion and 109 mmscf/yr digester gas combustion. The latter accounts for only 2433 hrs/yr (see attached boiler calculation sheets).

Old Condition 15= New Condition 16: New facility-wide emissions including DG1-DG2, B1-B4, F1-F3, B5-B7, D1-D3, liquid management, solid management, and T1-T3.

New Conditions 17 and 20: Visible emission limits and monitoring requirements for DG1 and DG2.

Old Condition 16= New Condition 18: The citation of 9 VAC 5-50-410 for NSPS Subpart IIII is removed in accordance with APG-569.

Old Condition 19= New Condition 22- Initial Notifications: Changed for new equipment DG1 and DG2.

Old General Condition 25= New Condition 28- Maintenance/Operating Procedures: Requirements for written operating procedures, maintenance records, and training records are retained as they are deemed appropriate and necessary for DG1 and DG2.

Facility's comments received 7/11/12 on draft permit:

- Condition 11: Facility requested a change from the boilerplate language of "The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil" to "The permittee shall obtain a certification from the fuel supplier for each shipment of distillate oil". Since this has been allowed for other facilities of the same organization, the request is accepted.
- Condition 20: The facility was initially required to perform weekly 6-minute visible emission observations (VEO) for DG1 and DG2, and follow up with VEE by Method 9 as necessary. Confident that there will not be any opacity in DG1 and DG2 exhausts, the facility proposed an initial 3-hr VEE by Method 9 to be carried out, and then, depending on test results of 0% opacity, less than 5%, or more than 5%, VEO would be waived, required monthly, or required weekly, respectively. It was determined that periodic monitoring is still necessary for continuing compliance demonstration even if the initial VEE shows no opacity. Therefore, in addition to the initial VEE, a one-minute monthly VEO is required for continuing compliance determination. Condition 20 is revised accordingly.
- Condition 12 and 16: The facility failed to notify DEQ of the change in manufacturer's emission guarantees that it received after the initial permit application submittal. The emission factor for NOx was doubled from 0.5 g/hp-hr to 1.0 g/hp-hr and those for CO and VOC also changed slightly. However, all still meet the NSPS Subpart JJJJ standards. Nevertheless, emission limits had to be recalculated for DG1 and DG2 and facility-wide.

Regulatory Review (cont.)

Facility's comments received 8/10/12 on revised draft permit: Upon receipt of the revised draft permit that addressed the 7/11/12 comments, the facility informed DEQ that it needs to have the digester gas throughput limit increased from 345.3 mmscf/yr to 431 mmscf/yr as it plans to add a Fat Oil and Grease (FOG) process that will increase gas production. DEQ water permit section indicated that this type of process is allowable with the facility's current water permit. As a result, the combined throughput limit in Conditions 9.d has to be changed as requested, and facility-wide emission limits in Condition 16 recalculated using the same worst case emission estimate procedure as discussed above. Facility still qualifies as a synthetic minor source at this time.

Final Recommendation: Recommend Approval.

Permit Writer's Signature:

Air Permit Manager's Signature:



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

(757) 518-2000 Fax (757) 518-2009

www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

Date

Mr. Edward G. Henifin, P.E.
General Manager
HRSD Atlantic WWTP
PO Box 5911
Virginia Beach, Virginia 23471

Location: Virginia Beach
Registration No.: 60959
AFS Id. No.: 51-810-00035

Dear Mr. Henifin:

Attached is a significant amendment to your state operating permit dated January 14, 2009 to modify and operate a wastewater treatment plant in accordance with the provisions of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit supersedes your January 14, 2009 state operating permit.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on **August 10, 2012** and solicited written public comments by placing a newspaper advertisement in the Virginian-Pilot on _____. The required comment period, provided by 9 VAC 5-80-1170 D expired on _____.

This permit approval to modify and operate shall not relieve HRSD Atlantic WWTP of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218-1105

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

It has been determined that each of the proposed digester gas generators (Unit Ref. No. DG1 and DG2) is an affected facility under 40 CFR 60, New Source Performance Standards (NSPS), Subpart JJJJ, and 40 CFR 63, Maximum Achievable Control Technology (MACT), Subpart ZZZZ, and therefore subject to owner/operator requirements of the NSPS and the MACT. Also, the previously permitted diesel-engine generator (Unit Ref. No. D3) is an affected unit under 40 CFR 60, New Source Performance Standards (NSPS), Subpart IIII, and all three previously permitted diesel-engine generators (Unit Ref. No. D1, D2, and D3) are affected units under 40 CFR 63, Maximum Achievable Control Technology (MACT), Subpart ZZZZ, and therefore subject to owner/operator requirements of the NSPS and the MACT, respectively. In summary, the units are required to comply with certain federal emission standards and operating limitations over its useful life. The Department of Environmental Quality (DEQ) advises you to review the attached NSPS and MACT to ensure compliance with applicable emission and operational limitations. As the owner/operator you are also responsible for monitoring, notification, performance testing, reporting, and recordkeeping requirements of the NSPS and MACT. Notifications and results of any performance tests shall be sent to:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

If you have any questions concerning this permit, please contact Ms Yen Bao by phone at (757) 518-2195 or by e-mail at yen.bao@deq.virginia.gov.

Sincerely,

Troy D. Breathwaite
Regional Air Permits Manager

TDB/YTB/60959_03_12_SOP.doc

Attachments: Permit
NSPS Subparts IIII and JJJJ
MACT Subpart ZZZZ
Source Testing Report Format

cc: Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

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Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

STATIONARY SOURCE PERMIT TO OPERATE

**This permit includes designated equipment subject to
New Source Performance Standards (NSPS).**

**This permit includes designated equipment subject to
National Emission Standards for Hazardous Air Pollutants for Source Categories.**

This permit supersedes replaces your permit dated January 14, 2009.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia
Regulations for the Control and Abatement of Air Pollution,

Hampton Roads Sanitation District
PO Box 5911
Virginia Beach, Virginia 23471
Registration No.: 60959
AFS Id. No.: 51-810-00035

is authorized to operate

a waste water treatment plant

located at

HRSD Atlantic WWTP
645 Firefall Drive
Virginia Beach, VA 23454

in accordance with the Conditions of this permit.

Approved on

DRAFT.

Maria R. Nold

Permit consists of 12 pages.
Permit Conditions 1 to 31.

INTRODUCTION

1. This permit approval is based on the permit application dated August 9, 1979, January 18, 2001, June 17, 2008, and March 7, 2012, including supplemental information dated May 16 and June 20, 2001, July 21, July 24, July 25, August 6, August 20, October 22, October 23, and November 3, 2008, April 4, April 6, May 4, May 16, May 22, June 18, June 20, 2012, **July 11, 2012, and August 10, 2012**. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

2. **Equipment List** - Equipment at this facility consists of the following:

Equipment to be Constructed			
Reference No.	Equipment Description	Rated Capacity	Federal Requirements
DG1 & DG2	Two (2) generator sets, Cummins QSK60 series lean burn engine, Model C1100N6C, firing digester gas pre-treated by a biogas cleaning/conditioning system	1,100 kW (1,531 hp) each, 21.45 mmBtu/hr combined heat input	NSPS Subpart JJJJ MACT Subpart ZZZZ

Equipment permitted prior to the date of this permit				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Original Permit Date
D3	One (1) Diesel generator	1825 kW (2647 hp) 17 mmBtu/hr	NSPS Subpart IIII MACT ZZZZ	1/14/2009 SOP
F1 - F3	Three (3) Waste gas burners	31 mmBtu/hr each	N/A	1/14/2009 SOP
B3 & B4	Two (2) Digester/Natural gas fired boilers	8.4 mmBtu/hr each	N/A	1/14/2009 SOP
T1-T3	Three (3) Underground Storage Tanks - Diesel	20,000 gallons each	N/A	1/14/2009 SOP
D1 & D2	Two (2) Diesel generators	1800 kW (2647 hp) each 19.7 mmBtu/hr each	MACT ZZZZ	7/11/2001 NSR

Equipment permitted prior to the date of this permit				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Original Permit Date
B1 & B2	Two (2) Digester/Natural gas fired boilers	8.4 mmBtu/hr each	N/A	11/05/1979 NSR
B5	One (1) #2 Fuel Oil fired boiler	1.9 mmBtu/hr	N/A	11/05/1979 NSR
B6	One (1) #2 Fuel Oil fired boiler	0.84 mmBtu/hr	N/A	11/05/1979 NSR

Equipment installed prior to the date of this permit				
Reference No.	Equipment Description	Rated Capacity	Federal Requirements	Installation Date
B7	One (1) #2 Fuel Oil fired boiler	2.8 mmBtu/hr	N/A	1988

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.

(9 VAC 5-80-850 and 9 VAC 5-80-1180 D3)

3. **Emission Controls** – SO₂ emissions from the digester gas generators (Unit Ref. Nos. DG1 and DG2) shall be controlled by the use of digester gas that has been pre-treated by a biogas cleaning and conditioning system to reduce the H₂S concentration to 50 ppmvd or less. The biogas cleaning and conditioning system shall be provided with adequate access for inspection and shall be in operation when one or both of the digester gas generators is/are operating.

(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)

4. **Monitoring Devices** - The biogas cleaning and conditioning system shall be equipped with a continuous monitoring system (CMS) to continuously measure and record the H₂S concentration (in ppmvd) in the digester gas at the treatment system outlet prior to feeding to the digester gas engines (Unit Ref. Nos. DG1 and DG2).

Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when one or both of the digester gas generators is/are operating.

(9 VAC 5-80-850, 9 VAC 5-80-1180D, and 9 VAC 5-50-260)

5. **Monitoring Device Observations** – To ensure good performance, as a minimum, the continuous monitoring system (CMS) to continuously measure and record the H₂S concentration shall be observed and evaluated as follows:

- a. The H₂S concentration shall be observed by the permittee with a frequency of not less than once per day;
- b. Calibration drift (CD): The permittee shall check, record, and quantify the calibration drift once daily in accordance with the procedures in 40 CFR 60 Appendix F and Performance Specification 7 in 40 CFR 60 Appendix B;
- c. Cylinder gas audit (CGA): The permittee shall conduct CGA on the calibration gas cylinder once every calendar quarter in accordance with the procedure in 40 CFR 60 Appendix F.

The permittee shall keep a log of the above observations and evaluations of the CMS, including the name of the observer, the date and time of observations, the results, and any corrective action taken.
(9 VAC 5-80-850, 9 VAC 5-80-1180D, and 9 VAC 5-50-260)

6. **Emission Testing** - The wastewater treatment plant shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-80-880 and 9 VAC 5-80-850)

OPERATING LIMITATIONS

7. **Fuel** - The approved fuel for the equipment is as follows:

Reference No.	Equipment Description	Approved Fuel Type
DG1 and DG2	Digester-Gas Generators	Pre-treated Digester Gas
D1, D2, and D3	Diesel Generators	Distillate Oil
B1 - B4	Boilers	Natural Gas and Digester Gas
B5-B7	Boilers	Distillate Oil
F1 - F3	Waste Gas Burners	Digester Gas
T1 - T3	Underground Storage Tanks	Distillate Oil

A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850 and 9 VAC 5-80-1180)

8. **Fuel Throughput** - The three diesel generators (Unit Ref. Nos. D1-D3), combined, shall consume no more than 199,700 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-850 and 9 VAC 5-50-260)
9. **Digester Gas Throughput** - The digester gas consumption of the two digester gas generators (DG1 and DG2), the four boilers (B1-B4), and the three waste gas burners (F1-F3) shall meet all of the following limitations:
- The two digester-gas generators (Unit Ref. Nos. DG1 and DG2), combined, shall consume no more than 289.1 million cubic feet of digester gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - The four boilers (Unit Ref. Nos. B1-B4), combined, shall consume no more than 109 million cubic feet of digester gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- c. The three waste gas burners (Unit Ref. Nos. F1-F3), combined, shall consume no more than 184 million cubic feet of digester gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- d. All digester-gas consuming equipment including the two digester-gas generators (Unit Ref. Nos. DG1-DG2), the four boilers (Unit Ref. Nos. B1-B4), and the three waste gas burners (Unit Ref. Nos. F1-F3), combined, shall consume no more than 431.0 million cubic feet of digester gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)

10. **Fuel** - The distillate oil for the three diesel generators (Unit Ref. Nos. D1-D3) and the three boilers (Unit Ref. Nos. B5-B7) shall meet the specifications below:

Maximum sulfur content per shipment: 15 ppm (0.0015 %)

(9 VAC 5-80-850 and 9 VAC 5-50-260)

11. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier for each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the distillate oil was received;
- c. The quantity of distillate oil delivered in the shipment; and
- d. The sulfur content of the distillate oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition number 10. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-850 and 9 VAC 5-80-260)

EMISSION LIMITS

12. **Process Emission Limits** - Emissions from the operation of the digester gas generators (Unit Ref. Nos. DG1-DG2) shall not exceed the limits specified below:

	<u>Each</u>	<u>Combined</u>
Particulate Matter (filterables)	0.1 lbs/hr	0.9 tons/yr
PM-10	0.1 lbs/hr	0.9 tons/yr
Sulfur Dioxide	0.1 lbs/hr	1.2 tons/yr
Nitrogen Oxides (as NO ₂)	3.4 lbs/hr	29.5 tons/yr
Carbon Monoxide	4.7 lbs/hr	41.4 tons/yr
Volatile Organic Compounds	1.7 lbs/hr	14.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers [3, 4, 5, 7, 9, 17, 20, and 21](#).
(9 VAC 5-80-850 and 9 VAC 5-50-260)

13. **Process Emission Limits** - Emissions from the operation of the three diesel generators (Unit Ref. Nos. D1-D3) shall not exceed the limits specified below:

	<u>Combined</u>
Nitrogen Oxides (as NO ₂)	28.0 tons/yr
Carbon Monoxide	3.1 tons/yr
Volatile Organic Compounds	0.9 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers [7, 8, 10, 11, 18, and 21](#).
(9 VAC 5-80-850 and 9 VAC 5-50-260)

14. **Process Emission Limits** - Emissions from the operation of the four boilers (Unit Ref. Nos. B1-B4) shall not exceed the limits specified below:

	<u>Each</u>	<u>Combined</u>
Particulate Matter (filterables)	0.3 lbs/hr	2.1 tons/yr
PM-10	0.3 lbs/hr	2.1 tons/yr
Sulfur Dioxide	5.4 lbs/hr	23.0 tons/yr
Nitrogen Oxides (as NO ₂)	0.8 lbs/hr	14.2 tons/yr
Carbon Monoxide	0.7 lbs/hr	12.0 tons/yr
Volatile Organic Compounds	0.1 lbs/hr	0.9 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 7, 9, 19, and 21.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

15. **Process Emission Limits** - Emissions from the operation of the waste gas burners (Unit Ref. Nos. F1-F3) shall not exceed the limits specified below:

	<u>Each</u>	<u>Combined</u>
Particulate Matter (filterables)	0.3 lbs/hr	0.6 tons/yr
PM-10	0.3 lbs/hr	0.6 tons/yr
Sulfur Dioxide	20.1 lbs/hr	38.7 tons/yr
Nitrogen Oxides (as NO ₂)	2.1 lbs/hr	4.1 tons/yr
Carbon Monoxide	19.7 lbs/hr	38.0 tons/yr
Volatile Organic Compounds	5.0 lbs/hr	9.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 7, 9, and 21.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

16. **Facility-wide Emission Limits** - Total emissions from the waste water treatment facility shall not exceed the limits specified below:

Particulate Matter (filterables)	3.5 tons/yr
PM-10	3.4 tons/yr
Sulfur Dioxide	62.3 tons/yr
Nitrogen Oxides (as NO ₂)	75.0 tons/yr
Carbon Monoxide	86.4 tons/yr
Volatile Organic Compounds	45.3 tons/yr
Hazardous Air Pollutants (HAPs)	19.8 tons/yr
Formaldehyde	8.9 tons/yr
Carbon Disulfide	3.8 tons/yr
Toluene	2.4 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 3-5, 7-11, and 17-21.
(9 VAC 5-80-850 and 9 VAC 5-50-260)

17. **Visible Emission Limit** - Visible emissions from each of the digester gas generators (Unit Ref. Nos. DG1-DG2) shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-850 and 9 VAC 5-50-260)
18. **Visible Emission Limit** - Visible emissions from each of the three diesel generators (Unit Ref. Nos. D1-D3) shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-850 and 9 VAC 5-50-260)
19. **Visible Emission Limit** - Visible emissions from each of the four boilers (Unit Ref. Nos. B1-B4) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-850 and 9 VAC 5-50-80)
20. **Compliance Determinations for Visible Emissions** -
- a. **Initial Performance Test**- Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted by the permittee on each of the operating digester gas generator exhaust stacks (Unit Ref. No. DG1 and DG2). The tests shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield six-minute averages. The permittee shall submit a test protocol to the Director, Tidewater Regional Office at least 30 days prior to testing for each stack. The evaluations shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which each of the digester gas generators will be operated but in no event later than 180 days after start-up. One copy of test results shall be submitted to the Tidewater Regional Office within 45 days after each test completion and shall conform to the test report format enclosed with this permit.
 - b. **Continuing Compliance Determinations**- The permittee shall observe each of the operating digester gas generator exhaust stacks (Unit Ref. No. DG1 and DG2) at least once per month during daylight hours of operations for visible emissions for at least one minute. If any visible emissions are noted from the stack, corrective actions shall be taken to eliminate the visible emissions. If visible emissions continue after the corrective actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. If compliance is not demonstrated by this VEE, timely corrective action shall be taken to bring the generator(s) back to compliance. Results of observations and/or VEEs shall be recorded in the operation log. Records of observations shall include the name of the observer, date and time of the observation, an indication of presence or absence of visible emissions, the duration of any visible emission incident, and any corrective action to eliminate visible emissions. If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).
(9 VAC 5-50-30, 9 VAC 5-80-1180, and 9 VAC 5-80-1200)

RECORDS

21. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of distillate oil in gallons for the three diesel generators (Unit Ref. Nos. D1-D3), combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of digester gas in cubic feet for the two digester gas generators (Unit Ref. Nos. DG1 and DG2), combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Annual throughput of digester gas in cubic feet for the four boilers (Unit Ref. Nos. B1-B4), combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Annual throughput of digester gas in cubic feet for the waste gas burners (Unit Ref. Nos. F1-F3), combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. Total annual digester-gas throughput in cubic feet for all digester gas consuming equipment (Unit Ref. Nos. DG1-DG2, B1-B4, and F1-F3), combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. All fuel supplier certifications.
 - f. H₂S monitoring device observation log.
 - g. All visible emission observations, and all visible emission evaluations (VEE) in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A).
 - h. Scheduled and unscheduled maintenance, written operating procedures, and operator training related to the digester gas generators (DG1 and DG2).
 - i. All notifications.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-850, 9 VAC 5-80-1180 and 9 VAC 5-50-50)

NOTIFICATIONS

22. **Initial Notifications** - The permittee shall furnish written notification to the Tidewater Regional Office of:
- a. The actual date on which construction of the biogas cleaning/conditioning system and the digester gas generators (DG1-DG2) commenced within 30 days after such date.
 - b. The actual start-up date of the biogas cleaning/conditioning system and the digester gas generators (DG1-DG2) within 15 days after such date.
(9 VAC 5-50-50 and 9 VAC 5-80-1180)

GENERAL CONDITIONS

23. **Permit Invalidation** – The portions of this permit to construct the biogas cleaning/conditioning system and the digester gas generators shall become invalid, unless an extension is granted by the DEQ, if:
- a. A program of continuous construction, reconstruction, or modification is not commenced within the latest of the following:
 - i. 18 months from the date of this permit;
 - ii. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;
 - iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
 - b. A program of construction, reconstruction, or modification is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.
(9 VAC 5-80-1210)
24. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
 - c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
 - d. To sample or test at reasonable times.
- For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130 and 9 VAC 5-80-850)

25. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-850)

26. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Tidewater Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Tidewater Regional Office in writing.
(9 VAC 5-20-180 C and 9 VAC 5-80-850)

27. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-850)

28. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the digester gas generators (DG1-DG2):

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- c. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment.

The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training. Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E and 9 VAC 5-80-850)

29. **Permit Suspension/Revocation** - This permit may be revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the terms or conditions of this permit;

- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
- e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application for this permit is submitted;
- f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.

(9 VAC 5-80-1010)

30. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Tidewater Regional Office of the change of ownership within 30 days of the transfer.

(9 VAC 5-80-940)

31. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.

(9 VAC 5-80-860 D)

SOURCE TESTING REPORT FORMAT

Report Cover

Plant name and location
Units tested at source (indicate Ref. No. used by source in permit or registration)
Test Dates.
Tester; name, address and report date

Certification

Signed by team leader/certified observer (include certification date)
Signed by responsible company official
*Signed by reviewer

Copy of approved test protocol

Summary

Reason for testing
Test dates
Identification of unit tested & the maximum rated capacity
*For each emission unit, a table showing:
 Operating rate
 Test Methods
 Pollutants tested
 Test results for each run and the run average
 Pollutant standard or limit
Summarized process and control equipment data for each run and the average, as required by the test protocol
A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
Any other important information

Source Operation

Description of process and control devices
Process and control equipment flow diagram
Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

Detailed test results for each run
*Sample calculations
*Description of collected samples, to include audits when applicable

Appendix

*Raw production data
*Raw field data
*Laboratory reports
*Chain of custody records for lab samples
*Calibration procedures and results
Project participants and titles
Observers' names (industry and agency)
Related correspondence
Standard procedures

* Not applicable to visible emission evaluations

DRAFT PERMIT APPROVAL FORM

Department of Environmental Quality
Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, Virginia 23462

Instructions:

The "Draft Permit Approval Form" provides the owner or certified company official an opportunity to accept or suggest appropriate changes to a draft permit. If a signed form is not received within one (1) week of the date of receipt of the draft permit, DEQ will assume that the draft permit is considered acceptable and will proceed with processing the permit.

Please check the applicable statement(s) below after thoroughly reviewing the draft permit.
Scanned forms (with signatures) may be returned to yen.bao@deq.virginia.gov or troy.breathwaite@deq.virginia.gov.

If scanning is not available, please fax to 757-518-2009, Attention: Ms Yen Bao or Mr. Troy D. Breathwaite.

_____ The owner or certified company official agrees with the conditions of the draft permit dated _____ . Please proceed to issue the permit with no change.

_____ The owner or certified company official finds condition number(s) _____ of the draft permit dated _____ unacceptable.

_____ The suggested changes are attached for your consideration.

_____ The owner or certified company official requests further discussion with DEQ regarding the above referenced condition(s).

Signature: _____

Name: _____

Title: _____

Facility: _____

Date: _____